

REMARKS

Applicants note that all amendments of Claims presented herein are made without acquiescing to any of the Examiner's arguments or rejections, and solely for the purpose of expediting the patent application process in a manner consistent with the PTO's Patent Business Goals (PBG),¹ and without waiving the right to prosecute the amended Claims (or similar Claims) in the future.

In the Office Action dated 3/9/07, the Examiner issued two rejections. Each of the rejections is discussed in detail below.

I. The Claims are Supported by a Proper Written Description

The Examiner rejects claims 4, 10, and 17 under 35 U.S.C. 112, first paragraph as allegedly containing new matter (Office Action, pg. 2). The Applicants respectfully disagree with the rejection. Nonetheless, in order to further the Applicants business interests, and without acquiescing to any of the Examiner's arguments or rejections, and reserving the right to prosecute the original (or similar) claims in the future, the Applicants have amended the claim to recite a siRNA targeted to a region found in Kv3.4a but not Kv3.4c. Support for this amendment can be found in the specification, for example, on page 36, lines 22-29, which describes the differences in mRNA sequence between Kv3.4a and Kv3.4c: "The sequence for Kv3.4c is identical to the Kv3.4a sequence except that 62 bp (position 2222-2283) of Kv3.4a are absent in Kv3.4c. As a result of this alternative splicing, the first 608 amino acids of both variants are identical, but the last 17 (for variant a) and 19 (for variant c) amino acids are completely different." (Specification, pg. 36, line 23-27). The specification references Vega-Saenz de Miera E. et al. (1993) Shaw-related K channels in mammals. in Handbook of Membrane Channels: Molecular and Cellular Physiology. (Peracchia C, ed. Academic Press, Orlando) pp 41-78 for support of the sequence differences between the splice variants. The Applicants have attached a copy of the cited chapter by Vega-Saenz et al. to this communication for the Examiner's convenience.

The Applicants further submit that the present specification specifically contemplates the region found in Kv3.4a but not Kv3.4c as a preferred target region: "The target of the siRNA is

¹ 65 Fed. Reg. 54603 (Sept. 8, 2000).

the 62 bp sequence absent in the Kv3.4c variant, or the sequences from position 2222-2283, are targeted by the siRNA.” (Specification, pg. 37, lines 2-4). The specification provides a working example of an siRNA targeted to the claimed region at Example 6. The Applicants note that Target 4 is contained within the claimed region.

As such, the Applicants submit that the Claims are supported by written description and respectfully request that the rejection be withdrawn.

II. The Claims are Non-Obvious

The Examiner rejects Claims 4, 10 and 17 are rejected under 35 U.S.C. 103 as allegedly being obvious in light of Chang et al. (J. Oral Pathol Med. 2003 32: 606; hereinafter Chang) in view of Low et al (U.S. Patent 6,071,891; hereinafter Low) and Hammond et al. (Nature Reviews Genetics 2001 2:110; hereinafter Hammond) and Tuschl et al (WO 02/44321; hereinafter Tuschl). The Applicants respectfully disagree with the rejection. The Applicants note that the present application has a priority date of 1/21/03. Thus, the Chang reference is not prior art. Furthermore, the cited references, alone or in combination (even if Chang is improperly used), do not teach all of the elements of the presently claimed invention as required for rejection under 35 U.S.C. 103. In particular, none of the cited references teach an siRNA complementary to the portion of Kv3.4 mRNA found in Kv3.4a and absent in Kv3.4c. As such, the Applicants submit that the Examiner has not demonstrated a prima facie case of obviousness and respectfully request that the rejection be withdrawn.

CONCLUSION

Should the Examiner have any questions, or if a telephone conference would aid in the prosecution of the present application, Applicants encourage the Examiner to call the undersigned collect at 608-218-6900.

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